

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A lithographic apparatus comprising:
an illumination system constructed to provide a beam of radiation;
a support structure constructed to support a patterning device, said patterning device serving to impart a cross-section of said beam with a pattern to form a patterned beam;
a substrate table for holding a substrate; and
a projection system that projects said patterned beam onto a target portion of said substrate, wherein at least one of said support structure and said substrate table includes a chuck and a frame that supports said chuck with respect to other parts of said lithographic apparatus, said chuck being thermally isolated from at least said frame, and wherein said chuck and said frame are separated and spaced from each other said frame is provided with at least one mirror on a side and said apparatus is provided with an interferometric position determination system for accurately positioning the patterning device or the substrate with the aid of said mirror.
2. (Original) A lithographic apparatus according to claim 1, further comprising:
a vacuum space positioned between said chuck and said frame.
3. (Original) A lithographic apparatus according to claim 1, wherein
said chuck and said frame are completely separated and spaced from each other by a gap.
4. (Original) A lithographic apparatus according to claim 1, wherein
at least one of said support structure and said substrate table is said substrate table and said chuck supports said substrate.
5. (Original) A lithographic apparatus according to claim 1, wherein
at least one of a part of a surface of said chuck directed towards said frame and a part of a surface of said frame directed towards said chuck has a low emissivity.

6. (Original) A lithographic apparatus according to claim 5, wherein said at least one of a part of a surface of said chuck directed towards said frame and a part of a surface of said frame directed towards said chuck is covered with a low emissivity coating.
7. (Original) A lithographic apparatus according to claim 6, wherein said coating contains chrome or silver.
8. (Currently Amended) A lithographic apparatus according to claim ~~[[5]]~~ 6, wherein said low emissivity coating has an emissivity below 0.1.
9. (Original) A lithographic apparatus according to claim 1, wherein said chuck includes a heat buffer system.
10. (Original) A lithographic apparatus according to claim 9, wherein said heat buffer system is structured as a passive heat buffer system.
11. (Original) A lithographic apparatus according to claim 1, wherein one of said chuck and said frame are structured to reflect electromagnetic radiation in the infrared range.
12. (Currently Amended) A lithographic apparatus according to ~~claims~~ claim 1 further comprising:
a heat transfer device operable between said chuck and ~~said~~ an object supported by said chuck to transfer heat between said object ~~to~~ and said chuck.
13. (Original) A lithographic apparatus according to claim 12, wherein said heat transfer device comprises a gas supply system to supply a backfill gas between said chuck and said object, said heat transfer device including a gas outlet positioned adjacent an object support surface of said chuck.

14. (Currently Amended) A method of manufacturing a device, comprising:
 - providing a substrate;
 - providing a beam of radiation using an illumination system;
 - using a patterning device to impart the beam of radiation with a pattern in its cross-section;
 - supporting one of the substrate and the patterning device with a chuck;
 - supporting the chuck with respect to other parts of the lithographic apparatus with a frame, said frame being provided with at least one mirror on a side;
 - thermally isolating the chuck from the frame;
 - accurately positioning the patterning device or the substrate with an interferometric position determination system and the mirror; and
 - projecting the patterned beam of radiation onto a target portion of the substrate;
 - ~~wherein said chuck and said frame are separated and spaced from each other.~~
15. (Original) A chuck for use in a lithographic device, comprising:
 - a first side having a support surface constructed to support an object;
 - a second side having a low emissivity coating to thermally isolate said chuck;
 - an enclosed chamber positioned within said chuck; and
 - a phase transiting material positioned within said enclosed chamber.
16. (Cancelled).